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ABSTRACT

Most sociometric research is based on same-age, mixed-gender classroom groups. By contrast, this study examined eight ad hoc play groups of mixed ages (6 and 7 years) and same gender at three levels of social organization: individual status, mutual dyads, and mutual triads. A total of 96 children in groups of 12 nominated three most- and least-liked peers before and after 10 consecutive weeks of after school free-play sessions. Significant age differences occurred in the Age X Gender X Time ANOVAs: at the individual status level, older children were more socially visible. At the mutual levels, older children had more friends and enemies and more triadic relations. No age differences occurred for social preference, or for the categories of popular, rejected, neglected, controversial, or average status. Age also played a significant role in the composition of dyads and triads: 87 percent or more of mutual liking dyads and 100 percent of triads were between same-age children. The 10-week stabilities of status were quite similar to those reported for classrooms. Preference was more stable than visibility. Rejected status was the most stable and neglected status the least. Mutual liking dyads were more stable (54 percent) than disliking dyads (30 percent). Triads were rare and unstable. Gender had no appreciable impact on social relations. (Author/RH)

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CHILDREN'S PEER RELATIONS:
SOCIOMETRIC STATUS, DYADS, AND TRIADS

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ABSTRACT

In contrast to most sociometric research which is based on same-age, mixed-gender groups (classrooms), 8 ad hoc play groups of mixed ages (6 and 7) and same gender were examined at 3 levels of social organization: individuals' status, mutual dyads (friends and enemies), and mutual triads. Children (N = 96) nominated 3 most- and least-liked peers in their groups of 12 children before and after 10 consecutive weeks of after-school free-play sessions.

Significant age differences occurred in the Age X Gender X Time ANOVAs: at the individual status level, older children were more socially visible; and, at the mutual levels, older children had more friends and enemies, and more triadic relations. No age differences occurred for social preference, or for categories of popular, rejected, neglected, controversial, or average status. Age also played a significant role in the composition of dyads and triads: 87% or more of mutual liking dyads and 100% of triads were between same-aged children.

The 10-week stabilities of status were quite similar to those reported for classrooms, e.g., preference was more stable than visibility, and rejected status was the most stable and neglected status, the least. Mutual liking dyads were more stable (54%) than disliking dyads (30%). Triads were rare and unstable.

INTRODUCTION

This is a short-term longitudinal study of the liking and disliking relations among 6- and 7-year-olds in play groups, based on their stated preferences. As such, it is part of the large body of research on sociometric status which has shown important relations of status to social behavior, to academic achievement, and to later adult adjustment. Yet this research field has been limited in two important respects: The type of groups studied, and the level of analysis of social relations. For example, Hallinan (1981) noted that the vast majority of sociometric studies are based on classrooms (same-age, mixed-gender groups). Likewise, there has been a preoccupation with individual differences in status in groups which, as Cairns (1983) has pointed out, has resulted in little study of other levels of social relations, such as mutual dyadic and triadic relations.

The aims of this study were to address these limitations by studying mixed-age, same-gender ad hoc play groups at three levels of organization--the individual, the dyad, the triad--and to investigate the roles of age, group gender, and time at each level of organization. The following specific questions were posed:

1. How do age differences and age similarities influence status and mutuality relations?
2. Are there important differences in boy groups and girl groups in social relations?
3. What degree of stability occurs in status and mutual relations over a 10-week period?

4. What is the incidence of mutual-liking and mutual-disliking dyads and triads in such groups?
5. Do children in ad hoc play groups show some of the same sociometric characteristics as children in classrooms?

METHOD

Subjects. A sample of 96 children was randomly selected form 14 classrooms of first- and second-graders in two suburban schools. Each child was randomly assigned to 1 of 8 after-school free-play groups of 12 children each. In each group were 6 first-graders and 6 second-graders, all of the same gender. No more than 3 children in any group came from the same classroom.

Procedure. Once a week for 10 consecutive weeks each of the 8 groups had 1 hour of free play with toys and games, as part of a larger study on natural conflicts between children. Prior to and immediately after these 10 weeks of group play, each child was asked about each peer in his/her group using individual photographs of each child: who they recognized or could name, and the 3 most-liked and 3 least-liked.

Sociometric Indices.

Individual status scores were derived using Coie and Dodge's (1983) procedure in order to facilitate direct comparisons with classroom data. Using standardized scores, the indices were: (1) social preference dimension called "likeability" (total liked-most nominations minus total liked-least), (2) social impact dimension called "visibility" (total nominations of both kinds), and (3) 5 status categories--popular, rejected, neglected, controversial, and average--defined by standard combinations of liking and disliking relations.

Mutual dyads were the independent mutual nominations of two children as best-liked (friends) or least-liked (enemies). Two types of dyadic scores were used: the number of dyadic relations each child had, and the number of dyads per group.

Mutual triads were the independent mutual nominations of three children as best-liked or least-liked.

RESULTS

1. Age. Significant age differences in social relations were evident at all 3 levels of social organization: 7-year-olds compared to 6-year-olds in these mixed-age groups were more socially visible, had more mutual liking and disliking relations, and more triadic relations. However, there were some notable similarities as well: the degree of likeability did not differ by age, and there were about equal numbers of each age group who were popular, rejected, neglected, controversial, or average (see Table 1).

Age also had a strong effect on the composition of dyads and triads: 87% at Time 1 and 91% at Time 2 of friendships were between same-age children, whereas only 41% (at both times) of mutual disliking dyads (enemies) were of the same age. In addition, 100% of the triads were composed of same-age children.

2. Gender. Only two marginal differences ($p < .06$) occurred between boy groups and girl groups: boys had a higher mean visibility in their groups than did girls in theirs and more boys were controversial in their groups than were girls.

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3. Time. After having played with peers for 10 weeks, two social relations showed significant increases: social impact and mutual disliking. The relatively stable social relations were social preference, social status categories (especially rejected and average status), and mutual liking.

4. Incidence of dyads and triads. There were 101 mutual dyads at the outset and 118 at the end of the play sessions, about equally distributed among the groups (see Table 2). Between 8 and 12 friendships existed within groups at Time 1 of which 54% were stable on the average. The frequency of disliking dyads at Time 1 varied more among groups than did liking dyads, ranging between 0 and 7, and they were less stable on the average (30%). Triadic relations were rare (0 to 4 per group) and unstable (only 1 of 7 remained intact). All triads were liking threesomes; only 1 disliking triad occurred (Time 2).

DISCUSSION

1. Age. At all 3 levels of social organization, age differences occurred. Older children compared to younger children were more socially visible in their groups, and had more mutual relations before and after play sessions. This is the most direct evidence to date, apparently, that with increasing age comes more mutuality in relations--dyadic and triadic. It may be that older children know who among their peers like (and don't like) them and this has a greater impact on whom they like (and don't like), whereas younger children may operate more often on one-way attraction or antipathy. The findings parallel the development of conceptions of friendship (Selman, 1980).

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Who-likes-whom was highly related to age, too: 87%-100% of mutual liking dyads and triads were same-aged, whereas only 41% of mutual disliking dyads were same-aged. Given almost equal probabilities of mixed-age dyads in these groups, the data underscore similarity (in age, and, perhaps, cognitive development, social skills, play interests, etc.) as a very potent factor in the forming and maintaining of reciprocated social relations.

2. Gender. Boy groups and girl groups were more striking in their similarities than in their differences. Gender had no appreciable impact on social relations.

3. Time. Classrooms and ad hoc groups such as these appear to be highly similar on the stability of relations: likeability was more stable than visibility, and the magnitudes were similar to those reported by Coie and Dodge (1983) with preference = .65 vs. .62 here, and impact = .40 vs. .37 here. Also replicating classroom data is the finding that rejected status is most stable and neglected, least.

4. Incidence of mutuality. The groups in this study provide 8 replications that mutual liking occurs more often and is more stable than disliking, both dyadically and triadically. Different rates may occur in classrooms with less free interaction.

5. Ad hoc play groups' characteristics are like classroom groups' at the individual status level, i.e., stability of status. The groups can not be compared on mutuality incidence because classroom dyads and triads have seldom been studied. The emerging, dissolving, and maintaining of mutual

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relations among children would be a worthy research goal to reveal mutuality's "natural history" and factors affecting its rate.

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TABLE 1

Means for Three Social Levels of Children's Groups

	Time 1	Time 2	Stability (T1/T2)
Individual Level: Status			
Social impact score[a]	4.68	5.28	r = .37
Social preference score[b]	0.68	0.40	r = .62
Status categories[c]			
Popular	1.7	1.4	23%
Rejected	2.5	2.3	50%
Neglected	1.5	0.8	8%
Controversial	1.2	0.9	22%
Average	5.2	6.6	56%
Dyadic Level[d]			
Mutual liking	1.6	1.6	54%
Mutual disliking	0.6	0.9	30%
Triadic level[e]			
Mutual liking	0.9	0.9	14%
Mutual disliking	0	0.1	---

[a]Likes + dislikes sums, possible range 0 to 11.
[b]Likes - dislikes, possible range -11 to +11
[c]Mean number of children in each group in each category.
[d]Mean number of mutual relations per child.
[e]Mean number of triads per group.

TABLE 2

Frequencies of Mutual Relations and Their Stability
for Each of Eight Groups (N = 12 Each)

	Dyads						Triads	
	Liking			Disliking			Liking	
Group	Time 1	Time 2	% Stable	Time 1	Time 2	% Stable	Time 1	Time 2
1	10	10	50%	4	7	50%	1	0
2	8	9	88%	0	3	---	0	0
3	10	9	50%	2	4	0%	0	1
4	8	9	25%	5	5	40%	0	1
5	10	10	50%	2	4	0%	0	0
6	8	10	50%	7	6	29%	1	1
7	8	8	50%	2	6	50%	1	2
8	12	11	67%	5	7	40%	4	2
TOTALS	74	76		27	42		7	7